

Discuss the Registered Theatre Practitioner's Role in the Management of Acute Post-Operative Pain.

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The term “Acute Post-Operative Pain” describes any pain that occurs after invasive surgery that involves tissue damage (“trauma”). According to the International Classification of Diseases (ICD), “Chronic postsurgical or post traumatic pain” (MG30.2) is defined to be any pain lasting *more than three months* (WHO, 2024); the implication is therefore that acute pain describes any pain lasting *up to three months*.

A Registered Theatre Practitioner, or Operating Department Practitioner (ODP), is a specialist role that supports surgeons, anaesthetists, and other medical staff during the three stages of perioperative care: anaesthesia, surgery, and recovery (NHS, 2024). ODPs therefore have a critical role in the management of post-operative pain as they are one of the few medical professionals to follow the patient through their entire surgical journey, from the ward and back.

Evidence shows that 20% of patients experience severe pain in the first 24 hours following surgery (Small & Laycock, 2020). The Perioperative Quality Improvement Programme (PQIP) 2017-2018 Annual Report also highlighted that 7.5% of patients experience severe, acute pain during the recovery phase (NIAA, 2018).

While the role of an ODP *normally* ends post-recovery – once the patient has been moved back onto a ward and is taken back under the care of nursing staff – they clearly have a significant role to play in minimizing pain during the recovery phase. Furthermore, they also have the potential, through their practice, to reduce the risk of pain-causing complications. These may include surgical site infections (SSIs) which occurs in 11% of surgical patients (NIAA, 2018), and where pain is a key symptom (infectioncycle.com, 2024).

During the recovery phase analgesics are often administered, and there is a growing push for “multimodal opioid-sparing analgesia” to avoid the unacceptably high rates of surgery-induced opioid dependency¹ (Pirie, 2020?). While multimodal analgesia is typically taken to mean using drugs with different mechanisms of action (i.e. paracetamol with NSAIDs, or low dose opiates with other painkillers) it can also mean the use of holistic approaches.

It's with this latter element that ODPs could have a significant effect on post-operative pain. In short: if patients are comfortable and monitored so that adverse effects are caught “early,” then it is less likely that treatment will need to be as aggressive. It would also have the benefit of shortening the time that someone is “in pain.” As an example from an analgesic

¹ This is perhaps more pertinent with the US due to their long-standing opioid crisis

perspective, if pain or pain-causing complications are spotted by ODPs early (through patient monitoring processes) then it may be possible to treat with non-opioid techniques, rather than waiting and needing to “jump straight in” with morphine or its analogues.

In 1986 (and later updates) the World Health Organization (WHO) referred to this concept as the “analgesic ladder”. (Cuomo, Bimonte, Forte, Botti, & Cascella, 2019). With this three-step process, mild pain is treated with non-opioids first. If pain persists, or worsens, then mild-opioid (e.g. codeine, tramadol) treatment can commence. If this also fails, then it can be followed by strong opioids (e.g. morphine, fentanyl). Despite its intuitiveness, *Cuomo et al.* describes the WHO analgesic ladder as lacking evidence of efficacy, and instead describes a similar concept called the analgesic trolley. Designed more for chronic pain disorders, it nonetheless illustrates how pain can result from a combination of biological, social, and psychological factors.

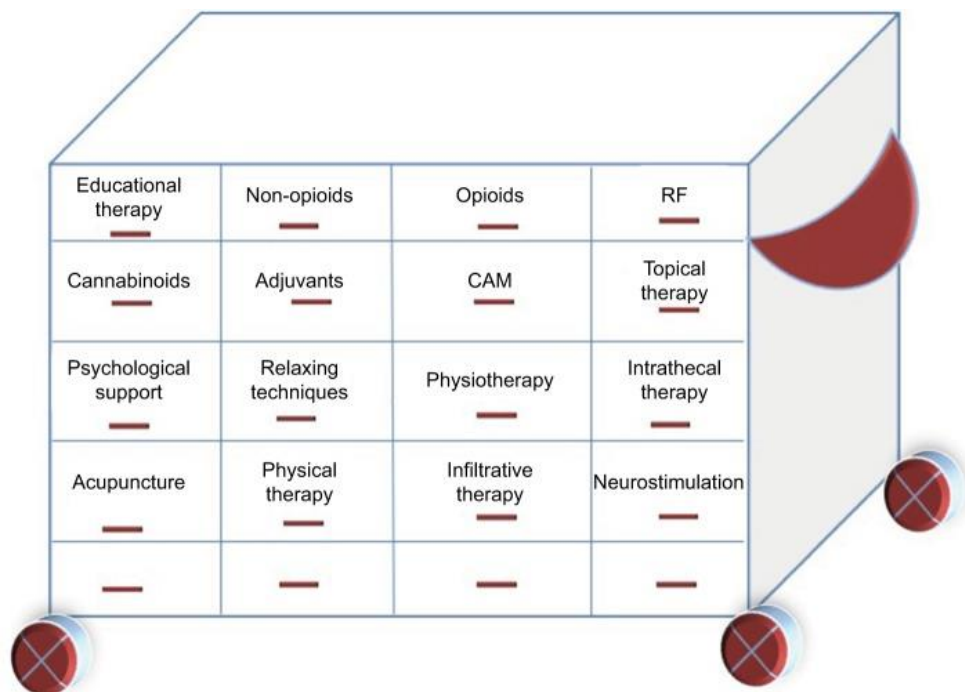


Figure 1- The analgesic trolley model for pain management (Cuomo et al.)

Two “drawers” stick out: psychological support and relaxing techniques – two holistic, non-invasive, non-pharmacological approaches that can be used by ODPs during the post-operative phase. It is common-sense that when someone feels like their pain is acknowledged, feels like their perceptions are validated, and is reassured that their pain is normal, then pain-enhancing mental states – such as anxiety, fear, confusion, and distress – can be reduced. Consequently, this reduces physical pain. To achieve these goals, techniques such open and honest communication, responsiveness to needs, proactive treatment, and providing a caring and comprehensive level of care, can help.

Expanding out from pain to general discomfort, the 2017-208 PQIP report also highlighted that 36% and 43% of patients experience severe or moderate thirst, respectively, post-surgery.

(NIAA, 2018) It's not hard to imagine that discomfort can exacerbate perceptions of pain, as well as increasing the risk of post-operative complications which cause pain. The ODP can therefore work to minimize discomfort and thus pain through their practice – especially in the absence of the ability to directly prescribe pain relief themselves.

It's worth highlighting that the monitoring of patients is key: early intervention is critical to minimizing the course and duration of most diseases or disorders. For example, patients can be assessed using the Numerical Rating Scale (NRS): a patient reported measure that rates pain on a scale of 0 (no pain) to 10 (worst pain imaginable). From these ratings pain can be graded into three categories – mild, moderate and severe – and any patterns identified (i.e. if it is increasing or decreasing). All these measurements can be passed to doctors or prescribers and used as one of several bases for treatment decisions (Gerbershagen, Rothaug, Kalkman, & Meissner, 2011). ODPs are thus responsible for gathering the necessary information to make informed treatment decisions. This implies that ODPs can assist in managing pain by providing doctors with the information they require to make good, clinically beneficial decisions.

During the pilot study between October 2007 and September 2008, the use of the WHO Surgical Safety Checklist led to complications dropping from 11% to 7% (-36%) and postoperative mortality decreasing from 1.5% to 0.8% (-46%) (Haynes, 2009). While this checklist focuses on process rather than monitoring per se, it does evidently show that many complications are avoidable. Therefore, an ODP can – through conscientious and evidence-based practice – reduce not only post-operative pain, but also complications that lead to pain, by ensuring that procedures and policies are followed correctly and that patients are accurately monitored and treated.

Moving on, when undertaking an in-theatres scrubbed role, ODPs can reduce the risk of surgical site infections in several ways (NICE, 2024):

- Ensuring the theatres are prepared, clean, and sterile, and that iodophor-impregnated drapes are used appropriately and set up correctly.
- Ensuring the patient's skin is correctly prepared, including the use of disinfection agents such as chlorhexidine or povidone
- Ensuring surgical trays and instrumentation is free from contamination, has been correctly sterilized by SSD/HSDU, and enters the sterile field correctly (Bali, 2020)
- Ensuring instrument counts are correct pre- and post-surgery so staff are satisfied that no foreign objects remain within the patient (Centre for Perioperative Care, 2024)

Given the ease at which pathogens can spread and infect patients, the ODP role therefore has a key role in minimizing the risk of SSIs and any associated pain and mortality. Careful preparation and strict adherence to infection control policies and national guidelines (i.e. NICE) by ODPs can reduce these complications, and it's the ODPs role to ensure that theatres are a hygienic and safe place within which operations can be performed.

From an acute-pain perspective, the ODP has a role to play in ensuring that the equipment is fit for purpose and causes no more trauma than necessary. For example, damaged equipment – such as blunt scissors or faulty power tools – can lead to unnecessary tissue damage. This risks not only immediate and severe pain during the recovery phase, but also heightens the risk of complications and lengthens hospital stays. Both latter risks can result in short-term pain that is ultimately avoidable had proper and conscientious pre-operative checks on equipment taken place.

In summary, the Registered Theatre Practitioner has a significant, wide-reaching role in the management and prevention of acute post-operative pain. The impact of their work stretches beyond the theatre and immediate postsurgical recovery phase – where their role is predominantly to care, monitor, and reduce discomfort – but also effects the entire patient's recovery process during their hospital stay and beyond. A failure to follow policy and guidance – or a lack of proactiveness or conscientiousness – can cause significant and painful complications, leading to longer hospital stays and increased morbidity and mortality.

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